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## How Does The Playground Role in Realizing Children-Friendly-City?

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### Abstract

Being a developing country, most of the Indonesian communities often discriminate children's roles, needs and rights. This situation forces Ministry of Women Empowerment and Child Protection of the Republic of Indonesia to declare Children-Friendly-City Policy (KLA). One of its scopes is offering chances to children to interact: Playground. Semarang, the capital of Central Java, becomes one of the pilot projects. Descriptive approach is used to determine the role of playground. This policy is expected to answer how to realize a better space for children in their social life and growth.

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**Keywords:** Children; playground role; Children-Friendly-City; child protection

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### 1. Background

The national development goals mandated the prosperity of social justice, which just by our common sense understood as no discrimination to all the nations' citizen, including children. Contrariwise, the roles, functions and rights of children are often not to be paid attention. In the national development progress, government as an executive agent does not pay much attention to children as part of the policy.

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Children are frequently being the most disadvantaged party in miserable situations; natural disasters, economic crisis and environmental degradation. Regarding this case, The Ministry of Women Empowerment and Child Protection of the Republic of Indonesia declares Children-Friendly-City Policy (KLA) No.02/2009 to go further since the World Fit for Children Declaration. The policy aims to accommodate the primary needs of children and optimize their roles in the development of their own social live. KLA becomes tool in accelerating the implementation of the Convention on the Rights of the Child (CRC) from legal framework to the strategies and programs that fit for children. KLA shall be a city that guarantees and protects the right of every child as a part of urban community. This means, children will have an equal proportion in participating in family life, community, and social, also accessing basic services; health and education, protection from human trafficking and violence, for feeling safe and unharmed while walking down the streets, in an unpolluted environment, and playing with others. One of the KLA scopes is infrastructure development which related to the implementation of child rights; playground.

Playground is a place of interaction, communication, and expression that can be accessed by children coming from various backgrounds. This is relevant to the function of playground which also can be used as an open space for relaxation as well as environmental conservation, the green area (Gallion and Eisner, 1994). Playground meant here refers to an open space equipped with playing facilities for children, under adult supervision. Mostly, in dense residential areas, playground availability is lower in rank to other interests; its existence has to give ways to commercial uses. It is difficult to find playground, especially in residential area in large cities (Darmawan, 2003). As an impact, children have to roam the streets, even in risky places out of parental advisory and they become more individualistic. For those who prefer staying at home, they get easily addicted to television.

Thus, development processes including urban planning must provide space for children to participate actively in it, under parental supervision. Based on these reasons, it is important to know the role of playground in the realization of the Children-Friendly-City (KLA).

There are 12 pilot projects of KLA in Indonesia. Semarang as one of the chosen is a metropolis in Central Java with 1.43% of population growth rate per year. Total population of Semarang reaches 1,434,025 inhabitants including 20.26% or 300,219 children, whose growth rate is reaching 5% per year (Central Java Statistic Centre, 2008). Government declared the participation of Semarang in Children Friendly City project, coincided perfectly with the commemoration of National Children's Day in 2009. Department of Women Empowerment, Child Protection and Family Planning, handles the execution and implementation of KLA in Semarang. A high population growth needs fulfillment of facilities and supporting infrastructure, related to children development process. In reverse, playground availability in town as public need defeated by commercial activities that brought benefits only for certain party. The changing of public spaces in Semarang is easily reflected in Simpang Lima area – the Pancasila Square - where many children are desperately scrambling to find space to play, among adult doing exercise or shopping every Sunday. This research is focused on the highest number of children population in the district of Semarang city, Tlogosari Kulon. Precisely, this district has 5852 inhabitants, with 278.5 hectares of total area, where there is only 21.75% green area (Central Java Statistic Centre, 2008). The potential space that can be profited as children playground is only 17.59 hectares, obtained from the use of green area and another land use (vacant lands, sports fields, neighbor's parks, etc.). Potential children playground reaches 29.02% from the total area of green space, or only 6.31% of total area in Tlogosari Kulon district. Land use in this district is dominated by residential; especially the dense small types houses.

## 2. Goals and Objectives

The goal of this research is gaining a detailed description of the playground role in the realization of Semarang as Children-Friendly-City by putting forward the case appeared in Tlogosari Kulon district. There are several steps such as: identifying and mapping playground form, analyzing playground qualities that is determined by several variables (security, comfort, supporting elements completeness, and accessibility) and analyzing playground role in the realization of Children-Friendly-City. The expected outcome is giving a good recommendation for parents who have children aged 0-14 years and local government to provide playground as a free open space, appropriate to its roles and functions, for children's interaction and communication.

## 3. Children-Friendly-City Concept

Children-Friendly-City (KLA) according to the Regulation of the Ministry of Women Empowerment and Child Protection is an administrative area development system that integrates the government, community and business world commitment and resources, in order to accomplish the rights of children under comprehensive and sustainable planned programs and activities.

The purposes of KLA are:

- Allaying the government, community and business community commitment, in the district/city level to bring about the development, subjected on children needs to grow up, in regarding them as our next generation;
- Integrating potential human resources, finances, facilities, infrastructures, methods and technologies of government, society and the business community in the district/city level to facilitate children rights;
- Implementing child protection policies through a strategically comprehensive and sustainable development planning district, according to indicators of KLA; and
- To strengthen the role and capacity of district government in achieving development in the field of child protection.

Eligible districts for children are those that meet the aspects of life with elements from both physical and non physical set out in the Convention on the Rights of Children and/ or the Law on Children Protection. To accelerate the realization of KLA development, Ministry of Women Empowerment and Child Protection treats KLA as a priority program in the field of child welfare and protection by settling 7 (seven) critical aspects in its development progress; health, education, social, civil rights and participation, legal protection, employment protection, and infrastructure.

KLA policy succession requires general and specific indicators. General indicators include health, education, protection, infrastructure, environment and tourism, while specific indicators cover KLA policy making and KLA implementation policy promotion.

The idea of KLA came from Kevin Lynch's research that reveals best environment for children is a city that implements clear rules and provides the same opportunity for children to learn and explore their environment or the world. The reason why KLA needed, is because cities with high proportion of children (high density), are the most unfriendly city for children, paying a small attention to their needs and priorities, and increasing children living in poverty. Many children living in urban areas are under threat of human trafficking, violence and pollution.

The concept of KLA according to UNICEF is the city that guarantees every child's rights as a citizen of the city and that their decision could also influence policies, which adopted in the city. They can also have role in family, community and social life, as well as obtaining basic services in health and education, protected from trafficking, cruelty and mistreatment. They have the right to feel safe on the street as well as meet and play with their friends, the child also had a green space for gardens and animals live in free

pollution environment, play a role in social and cultural activities, able to access each service, regardless of their ethnicity, religion, wealth, gender, and disability.

The government learns how to fulfil child desire to their playground by listening to their suggestion, and willing to work with them to organize the place. Planned playground that fits and friendly to children must considered the results of consultation with children, such as how they use the place and what they want to do, so the development process does not need a child restraint (Public Playground Safety Handbook. 2008. CPSC. USA). Some developed countries such as England, Belgium and Netherlands possessed a lot of examples of consultations conducted with children in building a playground.

According to the Regulation of the Minister of Women Empowerment and Child protection, the child in question is someone who has not aged 18 (eighteen) years, including those who are still in the womb. However, in this research, it is referring to the labor laws that define, boys or girls aged less than 14 years (Hukum Perburuhan Pasal 1 (1) Undang-Undang Pokok Perburuhan (Undang-Undang Nomor 12 Tahun 1948).

Children in their development ages until the school ages need to get an equal proportion time between playing and learning. Moreover, according to age stage, those who still need to play are the proportion of children aged 0-14 years. Here is the description of age stage of children (Woolfson, 2001):

- Age 0-1 years, called the baby
- Age 1-3 years, called the toddler
- Age 3-5 years of infancy
- Age 5-12 years, the age of basic education schools
- Age 12-14 years, referred to as pre-adolescent age

One of the components outlined in the KLA development is infrastructure, to be more specific is children playground as children activities place. Children's playground is an open space, specific in use with special facilities that is beneficial to children playing activities, or to watch the games, performances and other organized activity, with freedom to choose according to the existing facilities. Playground is a place where children develop their intelligence and personality in social life. This is where the children make contact and interaction with the social environment, which ultimately helped to shape the children character (Hurlock, 1978).

Important point that should pay our attention according to the Convention on the Rights of the Child, is the children rights to play, refers to the availability of green areas and open space. Playground should located near the house, especially for younger or disable children.

Quality of children playground, determined by several variables (Moore, 1992):

- Security; it means secured from various disturbances (trafficking, crime, accident, etc). The indicators are; distance from the settlements  $\leq 200$  m, visibility to the reach of parental supervision, distance to the centre activities  $\leq 100$  m.
- Safety; in children's playground means no harm/ not endanger the children. The safety indicators in a children's playground is the distance from vehicles passing by  $> 5$  m, no wires as sharp boundaries, steep curve of the ground / too crooked, no playing materials that risk the safety of children.
- Leisure; Children's playground must have a comfortable environment, free of distractions around, as there is no strewn garbage, availability of sitting places, garbage bins, and shady trees. This space also avoided from being a multi used area, such as sudden vehicles parking or waste disposal.
- Accessibility; indicates level of service and the playground accessibility from any side, where the location not fenced by a high wall / barrier with height over 150 cm, not located across or along the river / great sewer / highway and pedestrian path separated to vehicle lane.

In addition, the quality of children playground can also be reviewed from the completeness of supporting playing facilities so that children who play can find new things and feel more pleasant.

Playground as one part of the open space has several functions (Hakim, 2003);

- Social: as place where children play a game or sport, in order to socialize, interact and communicate to others
- Recreational: as a place to travel, and find something fun and enjoyable
- Ecological: freshen the air, improve the micro climate, absorbing rainwater and providing light and air circulation to the surrounding
- Educational: children expected to find new educational leisure.

#### 4. Research Methodology

This research uses a quantitative approach, especially descriptive type that describes playground form and quality. This quality measured by scoring method, followed by explanation and narration of the playground role description in the realization of KLA. Data collection process requires questionnaire especially for parents who live at informal settlements and have children aged 0 to 14 years, by using purposive sampling technique. In addition, a short sudden interview will be held using accidental sampling method, with children found on the spot.

Table 1. Playground Quality Variables Criteria and Indicators. Source: Moore, (1992)

Variable	Criteria	Score	Indicators
Safety	Safe	3	Proximity to settlements $\leq 200$ m Visibility to the reach of parents view Distance to the centre of environmental activities $\leq 100$ m Free of danger and threat of crime
	Safe enough	2	One indicator not suits and unfulfilled
	Unsafe	1	Two or more indicators not suit and unfulfilled
Leisure	Comfortable	3	No strewn garbage Availability of sitting seat and trash cans Number of shady trees and others No misused activity; sudden parking or waste disposal sites
	Comfort enough	2	One indicator not suits and unfulfilled
	Uncomfortable	1	Two or more indicators not suit and unfulfilled
Completeness of playing facilities	Complete	3	Adequate facilities to suit the number of children Condition of game facilities, well-groomed
	Complete enough	2	One indicator not suits and unfulfilled
	Incomplete	1	Two or more indicators not suit and unfulfilled
Accessibility	Accessible	3	Location accessibility from all directions Unlimited high wall / barrier with a height $<150$ cm Not located across or along the river / great sewer / highway Separated pedestrian path to vehicle lane
	Accessible enough	2	One indicator not suits and unfulfilled
	Inaccessible	1	Two or more indicators not suit and unfulfilled

## 5. Mapping of Playground in Tlogosari Kulon District

Playground mapping in this research use RW – local name of sub district in Indonesia- as an analysis unit to ease the process from administrative border. Tlogosari Kulon District consists of 28 RW wherein each playground located in the center. Even though in every RW there is a children playing area, in fact there are only two playgrounds are equipped with playing facilities. And the others are only sport courts or vacant lands. If viewed from its accessibility, so there is only one playground that is not located in the center of RW (RW 8), so non habitant children of RW 8 who live nearby can also benefit the area. Based on the quality indicators, playgrounds that located in the center of RW own a higher range of service, viewed from its accessibility from children homes. The analysis shows that there are three characteristics; playground with a range of service < 75 m, 75-150 m and > 150 meters. This coverage can be said quite close, due to the relatively small scope of RW that in average consists of 100 houses, causing a small range of such coverage. Playground with coverage of < 75 meters indicates the closest distance to home, while 75-150 meters indicate its capability to reach resident who lives in the borderland of RW, and range of service >150 meters show that playgrounds are able to serve up the outer borderland residents. Thus we can conclude that playground accessibility is quite good.

## 6. Playground Quality Analysis

Playground qualities are defined by safety, leisure, completeness of playing facilities and accessibility variables. This analysis uses scoring method (see table 1). Playground quality assessment is taken based on the answer of 100 parents as respondents whose children use the playground. Result of this assessment will be compared to children's opinions. Their opinions do not counted using scoring method due to its descriptive character.

Table 2. Playground Quality Scoring

Variable	Criteria	Score	Frequency	Score x Frequency
Safety	Safe	3	77	231
	Safe enough	2	23	66
	Unsafe	1	0	0
Completeness of playing facilities	Complete	3	31	93
	Complete enough	2	42	84
	Incomplete	1	27	27
Leisure	Comfort	3	26	78
	Comfort enough	2	32	64
	Uncomforting	1	42	42
Accessibility	Accessible	3	25	75
	Accessible enough	2	75	150
	Inaccessible	1	0	0
Total Score				910

After finishing playground quality assessment, by scoring them, the class and interval could be determined.

The highest score	$= 3 \times 100 \times 4$	$= 1200$
The lowest score	$= 1 \times 100 \times 4$	$= 400$
Information :		
3	→	The highest score for each variable
1	→	The lowest score for each variable
100	→	Amount of respondents
4	→	Amount of questions

The next step is counting the class and interval, using Sturges method with the following formula (Nazir, 1998);

Class range	$= 1200 - 400$	$= 800$
Amount of class	$=$	
$K = 1 + 3,3 \log N$		$N$ : Amount of questions
$= 1 + 3,3 \log 4$		
$= 2,98$ rounded up 3		
Interval	$= 800 : 3$	$= 267$

Based on class and interval determination above, there are three classes of playground quality concluded in the following table.

Table 3. Class and Stage of Playground Quality

Class	Quality	Score	Information
I	Good	933 - 1200	Playground fulfilled all of quality variable; safety, leisure, completeness of playing facilities and accessibility
II	Sufficient	665 - 932	There are several indicators in the variable that are unfulfilled, influenced playground availability
III	Bad	397 - 664	Playground unfulfilled the playground quality variables. Unable to use

Result of the research, reaches 910 points, and is included in the interval of 665 – 932, and is classified as sufficient quality. The incapability to reach maximum points for quality of playground caused by several reasons which explained per variable, as follows;

Accessibility variable earns only enough value, because 75% of respondents considered that the existing children's playground space is less accessible. Although all children's playgrounds are located in the mid of the environment, parents cannot supervise or see their children during playing. This is influenced by a solid housing design where most residents build without leaving an open space, thereby blocking the visibility to the playground. In addition, the playground was not maximally well planned, which the provision is only by recycling a residual land (vacant land). Similarly, the completeness of



playing facilities, where there are only 3 playgrounds that are better facilitated. Opinions about the accessibility and lack of playing facilities are often mentioned by parents who have children aged <10 years, where the children seem relatively too young so that it is necessary to give an extra supervision.

Meanwhile, parents who have children aged 10-15 years prefer the aspects of comfort during playing, such as the availability of sitting group, shade etc. However, the convenience variable does not meet (42%) with several reasons:

- Most playgrounds are also used as communal parking area. It is related to condition in Tlogosari Kulon, which is dominated by small houses type without leaving a private open space for garage or carport for their vehicle. What the people do as a common action is using the rest of an open public space, which is also a children playground, for parking area.
- As mentioned above, the rest of common reason is playground use as communal waste disposal for residents without waste disposal in their home. Mostly, habitants living next to playground burn the garbage that makes an uncomfortable condition in playground.
- Lack of trees as shades and sitting groups become the reason of less quality in leisure variable. This situation implied to the afternoon or night playground utilization by children.

Playground quality assessment in parent's opinion has different result compared with their children opinion. Parents focused on accessibility and supporting factor like completeness of playing facilities. For leisure variable, children are not bothering completeness of playing facilities showed by high frequency of playground utilization with less or often without facilities. This opinion expressed children age 10-15 years old, who usually ride bicycle, play kite, and play hide and seek, yet children aged 0-9 years old enjoy playground equipped with playing facilities. Children also feel more comfortable to have fun in playground without parental supervision.

## **7. Playground Role in Realizing KLA**

As mentioned on the calculation of playground quality, the availability of playground classified as sufficient in quantity. This is quite important considering that one of the KLA general indicators is the existence of supporting facility.

Finally, the link of child right's fulfilment as the goal of KLA in a part of accommodating their right to gain pleasure in a positive way seems to be far from being optimal. This is indicated by the persistence of the adult's activity domination on children's playground, such as for parking and waste disposal sites.

Children's playgrounds' role and function can be seen in four domains; social, education, recreation and education. The most dominating roles nowadays are social and recreational, where public open spaces accommodate the socialization and children's playground.

The playground role as public facilities which provides educational aspect has not been met yet. Detailed explanation of the role and function of children's playground in realizing KLA can be seen as follows:



Table 4. Comparison KLA's Indicators and Existing Condition based on Playground Role Criteria

Playground Role	KLA's Indicators	Existing Condition
Social	Children able to play freely, meet and socialize with others	Playground misused as a communal parking area, laundry spreading area that cause children roams the streets to have pleasure.
Ecological	Above pleasurable condition, ecologically a playground shall fulfill its function as an open free space which provides fresh air and healthy environment.	Lack of trees as shades and number of residents who disposed garbage on the yard evoke bad odor to environment.
Recreational (leisure)	Providing facilities for children to meet their basic social needs, started with a safety and comfortable playground for children coming from all parties of society.	Incompleteness of facilities and badly established playground starts from the location to the large.
Educative	New experiences discovery	Beside the social life education, no other educational effect appears, for the activity centered in playing games.

From societies' point of view existing playgrounds are considered good enough but when related to role indicators of playgrounds those existing playgrounds are far from the requirements. Based on the above table, role of children playground is still as a space to meet and play. Sometimes certain children face some distraction because of sudden adults' activity. Children visit frequencies to playgrounds are also high. It indicates that children's need of playground is high. The high visit frequency to playground also influenced by the ownership of toys at home, where on average <10 pieces. This fact is also influenced by parents' economic background, mostly those who works as industry laborers. According to the needs and availability, it can be concluded that the role of children's playground to support KLA policy is not maximized yet. Results of the analysis in Tlogosari Kulon village are reflections of Children Friendly City policies, where children's playground as one of the indicators, have not played the maximum role. This can be seen from:

- Poor attention of the government related to infrastructure provision, especially a good quality of children playground. Since defined and committed to realize Children Friendly City (KLA), Semarang City government has not made real efforts yet to provide qualified playgrounds.
- Poor attention of parents associated with children playground utilization. Parents have not fully understood children's need to play yet. It can be seen from their using of playground as other activities than playing. Besides, there is no effort made by society to increase the quality of playground in their surroundings.
- Unintegrated provision of infrastructure, which focused only on the physical appearance, without seeing towards the role of children playground that must be met other roles, such as recreational and educational role
- In playground planning and utilization, children are not considered as the source of aspirations. They who prefer the comfortable aspect has not been heard yet.

## 8. Conclusions and Recommendations

The availability of playground in Tlogosari Kulon dominates by sports field - square. This playground forms affects the utilization and availability of supporting facilities. Characteristics of the surrounding land uses also affect the role of children's playground. Dense residential with a small type of house forces

the residents to take advantage of open space around them. This condition affects the quality of children's playground. The role of children's playground as an open space is accommodating children to meet their social needs in positive way. While the role related to the realization of KLA, playground as a forum for children sharing their aspirations and activities outside home provides greater benefits such as in the case of educational.

Semarang in the commitment to become Children-Friendly-City, has comprehensive plans related to infrastructure provision that need to be directly related to children. In addition, parents are expected to increase their understanding related to the importance of children's playground for their development and a forum to share their aspirations.

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